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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

WINBOM, H.

Appl. No. 10/777,219

Filed: February 13, 2004



Atty. Ref.: 4010-37; Confirmation No. 5323

TC/A.U. 3684

Examiner: Vizvary, Gerald C.

For: A MULTI SITE SOLUTION FOR SECURITIES TRADING

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March 21, 2011

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PRE-APPEAL BRIEF REQUEST FOR REVIEW

One of the reasons for maintaining a secondary back-up site is for a trading exchange to survive major disasters. To do this effectively, one would assume that all of the data from the primary site needs to be provided to the secondary site. A problem with this assumption and with traditional fail-over systems is the sheer volume of information used in some trading systems. Consider a non-limiting example where the quote/order rate is approximately 40,000 to 1 (as illustrated in the first figure included in Applicant's last response). Market makers, who are responsible for maintaining a market, usually generate new quotes at least every second for each of the instruments traded on the primary site exchange that they are responsible for. At this kind of re-quote rate, the inventor realized that it is not necessary to transfer the quotes to the secondary site and update the secondary site orderbook because the market makers will generate another re-quote if the primary site fails. So order and deal information from the primary site is stored at the secondary site but not quote information.

Another aspect recited in dependent claims relates to a corrective function at the secondary site that uses the deal (match) information at the primary site to update the orders at the secondary site. In the second figure in Applicant's last response, orders O1 and O2 are stored at both the primary and secondary sites, but not the 40,000 quotes (q). A third order O3 arrives and matches a portion of quotes q6-q8 which are on the same price level (in this example,

pro-rata matching is used). Specifically, order O3 is for a volume of 200 contracts, and quotes q6-q8 have a total volume of 100. After the deal (match), order O3 has 100 contracts left, which means that the secondary site needs updating. A corrective function implemented by the secondary site computer uses the primary site deal (match) information to update order O3 to a volume of 100 contracts.

Claims 1-29 stand rejected under 35 U.S.C. §103 based on Wang and Kramer. Wang describes a generic site failover system. Specifically, a controller automatically configures a second host computer to use the data of a first host computer and to provide additional computational resources. There is no distinction between what data is stored at the primary site and what data is stored at the secondary site. Rather, Wang teaches that all data or parts of certain data may be replicated to the secondary site (9:36-56 and 10:58-11:65). The “data” in Wang comprises operating system information, application program information, and application program data. But Wang does not describe any intelligent selection and transfer of a particular subset of data to the secondary site in combination with using that subset of data to update a larger data set in order to save bandwidth and hardware resources. There certainly is no teaching of doing this in an automated securities trading system.

Kramer describes a trading system that permits traders to use portable trading terminals 112-130 that communicate with a central computer 110 using radio signals 132 as shown in Figure 1. Kramer lists the significant technical features of his invention at 10:33-11:24. Other than being directed to a trading system, those features are not related to the significant technical features included in the pending claims.

Clear Error #1: Wang and Kramer Lack a Securities Site Computer Executing Trades According to Quotes from Market Makers and Orders from Traders

The Examiner identifies 20: 39-45 in Wang as teaching the claimed “method for trading in securities, the trading being carried out at a primary site that includes a primary site computer according to information received from market makers and traders, said information comprising quotes from market makers and orders from traders for one or more instruments,” recited in claim 1. But the Wang text at col. 20, lines 39-45 says nothing about trading securities, market makers, traders, quotes from market makers, or orders from traders.

The final office action (FOA) now identifies 3:23-32 and equates Wang’s teaching of “performing electronic commerce” with “trading securities, market makers, traders, quotes from

market makers, or orders from traders as well as creating deals.” See page 3 of the FOA. This unreasonable. Electronic commerce is an umbrella term that covers buying and selling of products or services over electronic systems and therefore includes securities trading via an electronic exchange. But electronic commerce does not teach securities trading via an electronic exchange just like the umbrella term “furniture” does not teach the particular structure of a chair. Moreover, the Examiner fails to point to text in Wang that actually teaches the claimed features: market makers, quotes from market makers, traders, and orders from traders. The burden is on the PTO to produce evidence showing where each claimed feature is specifically taught in a prior art reference. Here, that burden is unmet.

Clear Error #2: Wang and Kramer Fail to Teach Receiving and Storing Quotes from Market Makers and Orders from Traders at the Primary Site Computer

For the claim step “receiving and storing of said information [quotes from market makers and orders from traders] at the primary site computer,” the Examiner admits this is missing from Wang and turns to Kramer at col. 13, lines 63-67. While there is posting of a transaction in a primary and secondary “blotter” described, Kramer fails to teach “said information,” which as defined earlier in claim 1 includes “information received from market makers and traders, said information comprising quotes from market makers and orders from traders for one or more instruments.”

In the FOA, the Examiner also quotes from Kramer at 17:43-48 and 12:3-21. This text is not relevant. First, the PTS 298 is a trader entry terminal and not a primary site where trading in securities is “carried out” and where the claimed “information” is used “to create deals in said instruments, said deals also being stored at the primary site computer,” as recited in claim 1. Reporting to the public a particular trader’s bids or asks is not the same as carrying out securities trades/deals. Also, the term “quote” as used in context in Kramer is not the same as the claimed quote. Claim 1 differentiates between quotes made by market makers and orders entered by traders. No such distinction is made in Kramer’s invention. Col. 11, starting at line 33 indicates the description is focused on “traders” and defines traders as including “those who represent buyers and sellers who are not on the exchange floors.” Kramer does not go on to separately define a category of market makers and quotes made by market makers to maintain a market in a particular security which is what a market maker is obliged to do.

The description at 12:3-21 relates to traders entering trade orders using their respective terminals (PTSS) and not performing the trades/making deals. Rather the host 110 performs those functions. See 4:60-66.

Clear Error #3: The References Fail to Use Said Information to Create Deals

For the claim step “using said information to create deals in said instruments, said deals also being stored at the primary site computer,” the Examiner cites to Wang at col. 41, lines 11-22. There is nothing in this text that describes creating deals in financial instruments or storing such financial instrument deals. The FOA also points to 3:23-32. But “acts of hosting an electronic commerce site on a first host computer, detecting a change in operation of the electronic commerce site, and automatically configuring a second host computer to host at least a portion of the electronic commerce site on the second host computer in response to the act of detecting” do not teach creating deals in securities at a primary site that performs securities trading.

Clear Error #4: Wang and Kramer Lack the Final Step of Claim 1

The last step of claim 1 recites “transmitting from the primary site computer to the secondary site computer replicas of the orders and the deals, but not transmitting from the primary site computer to the secondary site computer replicas of each of the quotes.” The Examiner relies on col. 17, lines 2-7 which explains: “In one embodiment, all of the data used by the primary host computer 110 (i.e., the operating system, application programs, application program data, etc.) is replicated for use by the secondary host computer 120. In other embodiments, only portions of the data of the primary host computer 110 are replicated.” The Examiner implicitly acknowledges that this text does not teach the quoted feature, but instead argues that “only portions of the data of the primary host computer 110 are replicated” includes “the possibility of” the claimed language. But a possibility of only replicating a portion of generic “data” is not a teaching of the claimed features of “not transmitting from the primary site computer to the secondary site computer replicas of each of the quotes.” Moreover, the leap from replicating only a portion of “data” to transmitting replicas of orders and deals but not quotes requires improper hindsight based on the instant application.

The specific trading exchange problems to which the claims are directed, as explained above and in prior responses, are not even identified in Wang. Neither reference teaches such a technological approach in order to reduce bandwidth and resource requirements while at the same time providing a fail safe system. Indeed, Wang teaches the conventional fail safe

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approach described in the background of this application of sending a “mirrored copy of each volume of data of the primary host computer 110 that is mirrored to a corresponding volume of data that is accessible to the secondary host computer 120.” Column 9, lines 49-54. In the example illustration above, the mirror copies would include the 40,000 quotes along with the deal and order information. The bandwidth and resource drain in the Wang-Kramer system would be much greater than that required by the claimed technology. In addition, the claimed technology reduces the latency for quotes because they do not need to be replicated.

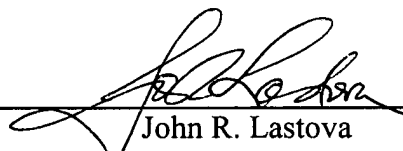
Clear Error #5: Dependent Claim Features Are Missing

Dependent claim features are also not taught in either Wang or Kramer. For example, neither reference teaches “storing at the secondary site computer replicas only of orders which have not yet resulted in deals” recited in claim 2, or “the secondary site computer using a corrective function and the deals stored at the secondary site computer to update the orders stored at the secondary site computer” recited in claim 8.

The final rejection is improper and should be withdrawn. The application is ready for allowance.

Respectfully submitted,
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